

3. Under what conditions did the barrier move the farthest?

When the car had 100 washers in it and dropped at 90 cm.

4. Under what conditions did the barrier move the least?

When the car had 12 washers and was dropped at 70 cm.

5. How was the momentum of the cart before it hit the barrier related to the distance the barrier moved after the collision?

The momentum of the block was the same as the car before it hit it.

6. Compare your results with your hypothesis. Does your data support your hypothesis.

~~Yes~~ ^{no} it does, the hypothesis was wrong
more mass = more acceleration not less mass

7. The formula for momentum is momentum = mass x velocity (or $p=mv$). Based on this, does either mass or velocity have a greater influence on momentum or are they equivalent?

Velocity increases momentum more than mass, in the results it shows that.

They are equal

8. If an object is not moving what is its velocity? What is its momentum?

Velocity 0 and its momentum is ~~not zero~~ 0.

9. Identify Limits What possible limitations or sources of error could you have experienced?

The washers could weigh different or the car could have been dropped not exactly at 90, 80 or 70 cm.

10. How would you modify your procedure now that you have seen the results?

I would have put 200 washers in the car to see if the momentum increased.

11. What new problem did you identify as a result of designing your investigation?

Too many washers didn't fit.

12. Explain how a game of pool or billiards involves momentum and transfer of momentum.

the pool stick transfers to the cue ball to number ball to the pocket which has too much inertia to move

Transfer of momentum